Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

45—19

Proceedings of the American Academy of Arts and Sciences.

Vol. XLV. No. 19. — May, 1910.

CONTRIBUTIONS FROM THE JEFFERSON PHYSICAL LABORATORY, HARVARD UNIVERSITY.

DISCHARGES OF ELECTRICITY THROUGH HYDROGEN.

By John Trowbridge.

(Continued from page 3 of Cover.)

VOLUME 45.

1. Hogg, J. L. — Friction in Gases at Low Pressure. pp. 1-17. August, 1909. 25c.
2. Sanger, C. R., and Riegel, E. R. — The Quantitative Determination of Antimony by the Gutzeit Method. pp. 19-27. 1 pl. October, 1909. 25c.
3. Kennelly, A. E. — The Equivalent Circuits of Composite Lines in the Steady State. pp. 29-75. November, 1909. 70c.
4. Heidel, W. A. — Περὶ Φύσεως. A Study of the Conception of Nature among the Pre-Socratics. pp. 77-133. January, 1910. $1.00.
5. Baxter, G. P., and Jones, G. — A Revision of the Atomic Weight of Phosphorus. First Paper. — The Analysis of Silver Phosphate. pp. 135-158. January, 1910. 40c.
6. Pearse, A. S. — The Reactions of Amphibians to Light. pp. 159-208. January, 1910. 75c.
7. Daly, R. A. — Average Chemical Compositions of Igneous-Rock Types. pp. 209-240. January, 1910. 70c.
8. Davis, H. N. — On the Applicability of the Law of Corresponding States to the Joule-Thomson Effect in Water and Carbon Dioxide. pp. 241-264. March, 1910. 50c.
9. Davis, H. N. — Notes on Certain Thermal Properties of Steam. pp. 265-311. 1 pl. March, 1910. 80c.
10. Lyman, T. — The Spectrum of a Carbon Compound in the Region of Extremely Short Wave-Lengths. pp. 313-322. March, 1910. 25c.
11. Pierce, G. W. — Experiments on the Electrical Oscillations of a Hertz Rectilinear Oscillator. pp. 323-335. March, 1910. 30c.
12. Peirce, B. O. — The Conception of the Derivative of a Scalar Point Function with respect to Another Similar Function. pp. 337-352. April, 1910. 30c.
13. Peirce, B. O. — The Effect of Leakage at the Edges upon the Temperatures within a Homogeneous Lamina through which Heat is being Conducted. pp. 353-360. April, 1910. 20c.
14. Morse, H. W. — On Evaporation from the Surface of a Solid Sphere. pp. 361-367. April, 1910. 20c.
15. Morse, H. W. — Some Minute Phenomena of Electrolysis. pp. 369-376. April, 1910. 20c.
16. Hall, E. H. — Air Resistance to Falling Inch Spheres. pp. 377-384. May, 1910. 20c.
17. Weatherby, C. A. — (I.) A preliminary Synopsis of the Genus *Echeandia;* (II.) Robinson, B. L. — Spermatophytes, new or reclassified, chiefly *Rubiaceae* and *Gentianaceae;* (III.) Weatherby, C. A. — American Forms of *Lycopodium complanatum;* (IV.) Fernald, L. M. — New and little known Mexican Plants, chiefly *Labiatae;* (V.) Weatherby, C. A. — Mexican Phanerogams. — Notes and new Species. pp. 385-428. May, 1910. 60c.
18. Thompson, M. D. — (LIII.) On the Equilibrium of the System consisting of Lime, Carbon, Calcium Carbide and Carbon Monoxide. pp. 429-452. May, 1910. 45c.
19. Trowbridge, J. — Discharges of Electricity through Hydrogen. pp. 453-463. May, 1910. 25c.

Proceedings of the American Academy of Arts and Sciences.

Vol. XLV. No. 19. — May, 1910.

CONTRIBUTIONS FROM THE JEFFERSON PHYSICAL LABORATORY, HARVARD UNIVERSITY.

DISCHARGES OF ELECTRICITY THROUGH HYDROGEN.

By John Trowbridge.